

# Optics/Acceptance Update

Min Huang

11/20/2013

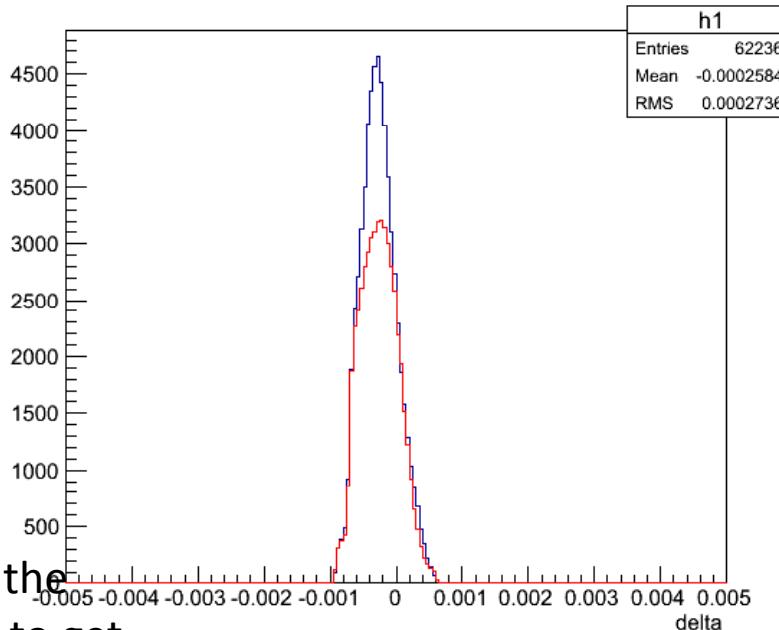
# Comparison of Target Quantities

- March 4<sup>th</sup>, 2012
  - Straight through, E\_beam=2.254GeV
  - Beam position (-2.6mm, 0.1mm)
- Snake transport functions forward + backward
  - Weighted by elastic cross section (g2psim, K. Steinfield)
- Optimized data (matrix by Chao)
  - Vertex and dp cuts to select C12 elastic events

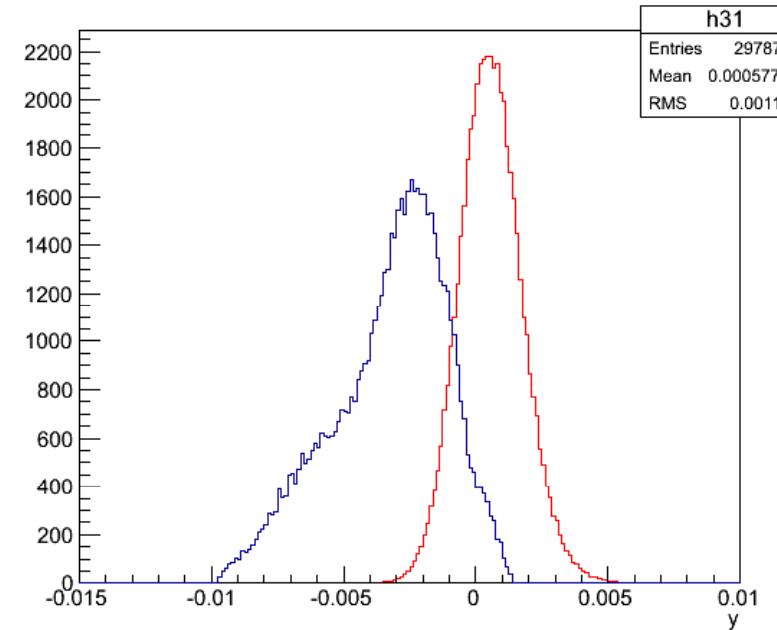
# Snake Data

Normalize the  
simulation to get  
central hole #of  
events equal

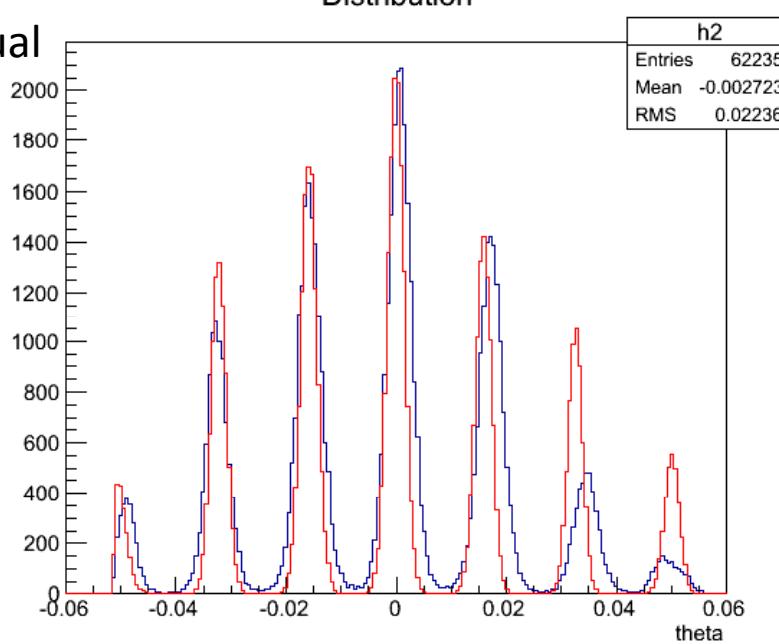
Distribution



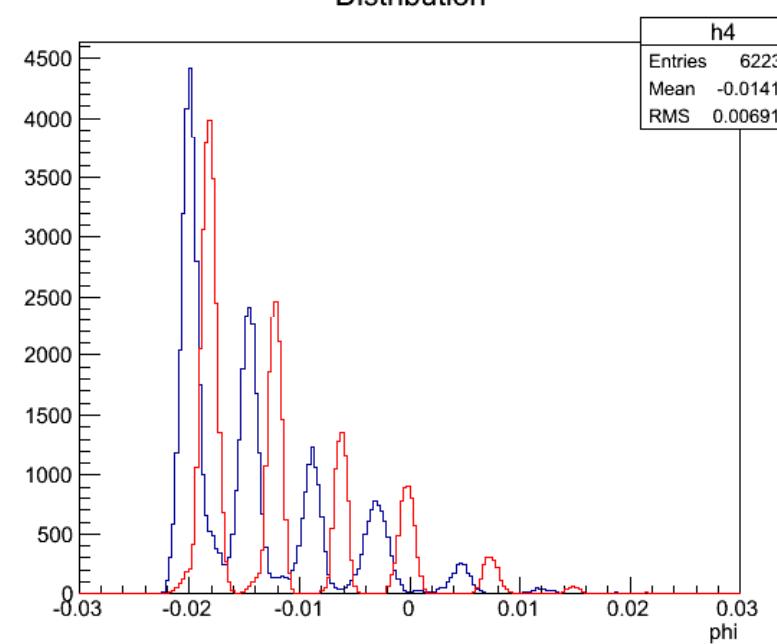
Distribution



Distribution

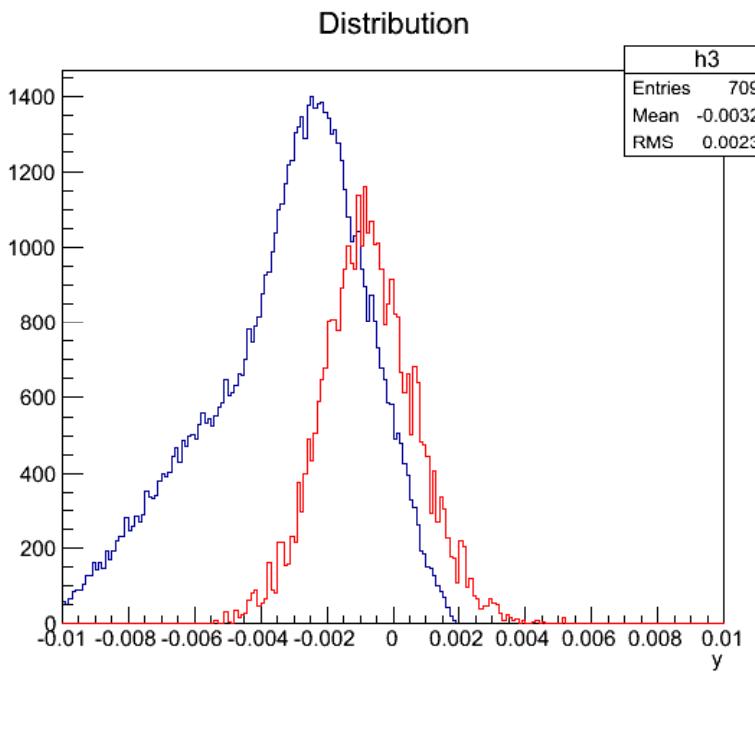


Distribution

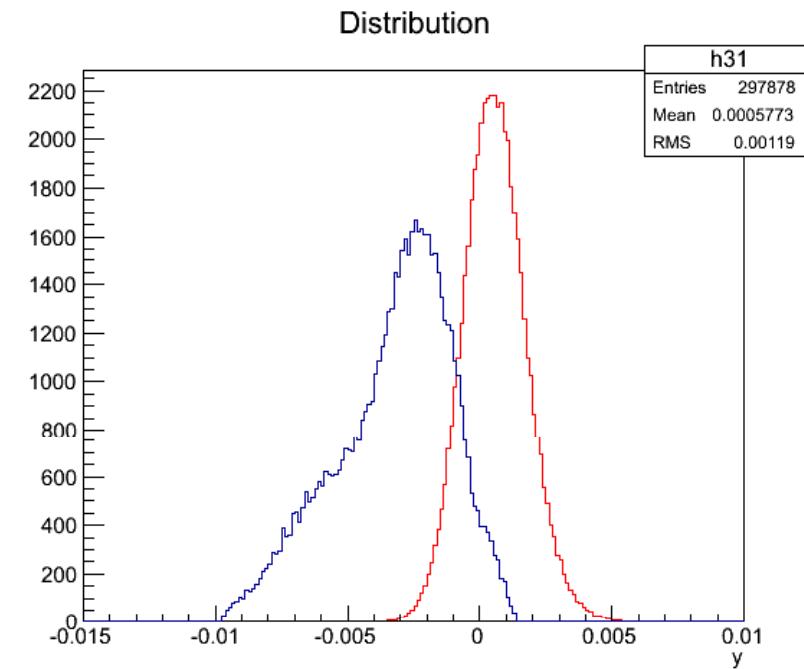


# Target y

Last meeting, before optimization



No  $y_{tg}$  calibration data on 3/4  
Used 3/14  $y$  matrix, seems no effect on the data

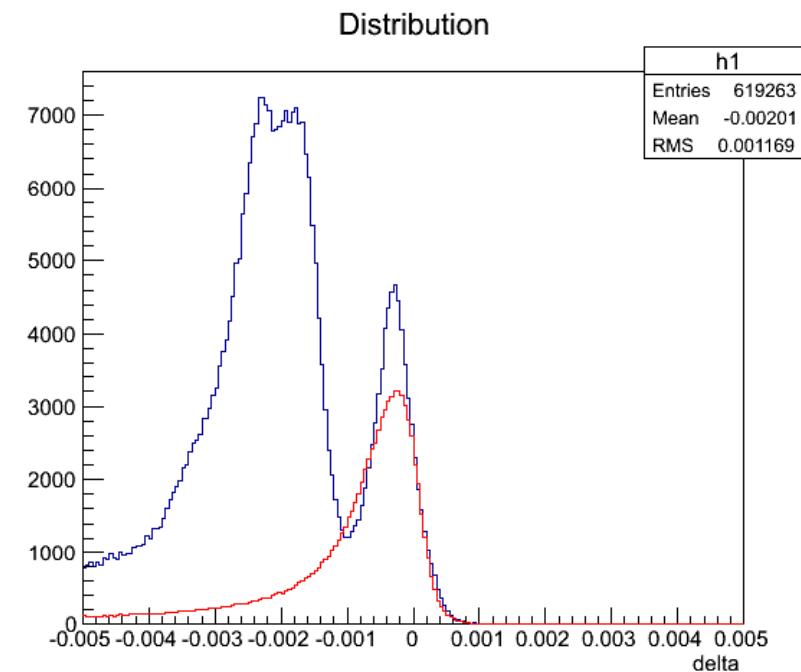
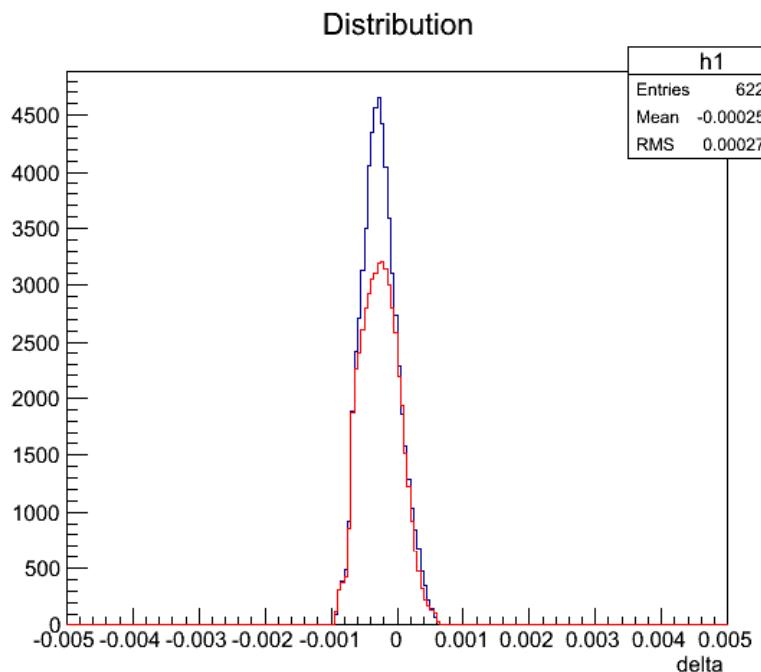


Beam\_x: -1.7mm 3/4  
Beam\_x: -3.6mm, -7.0 mm 3/14  
Do a  $y_{tg}$  optimization combining all of them?

Snake  
Data

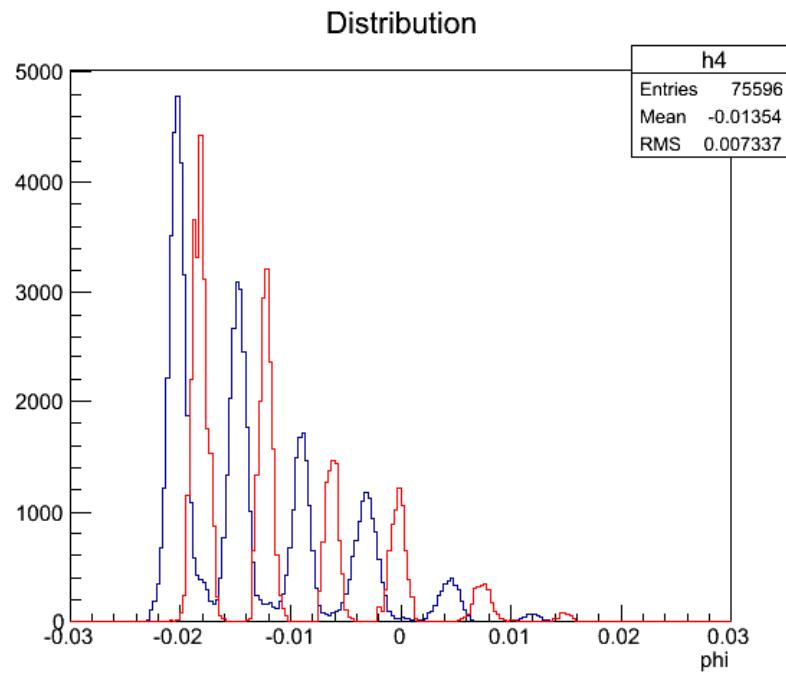
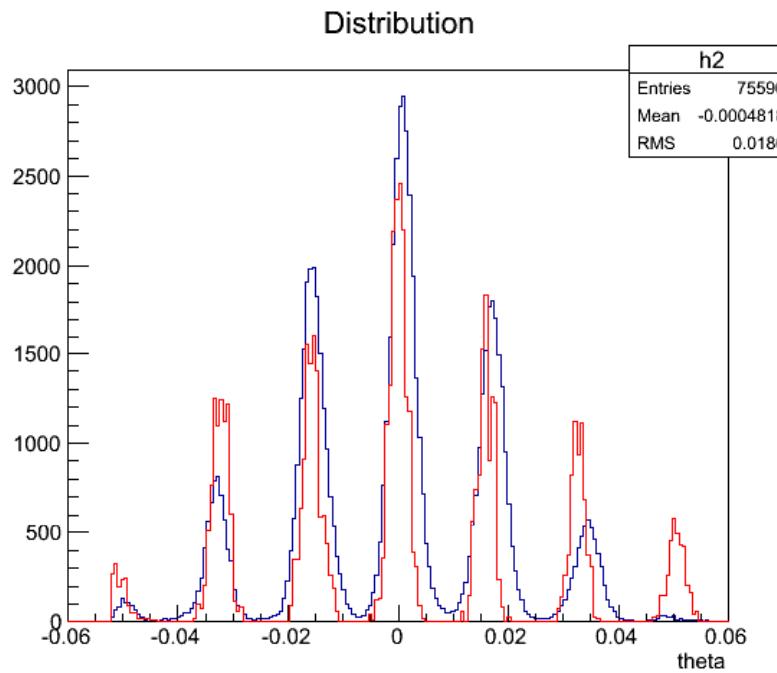
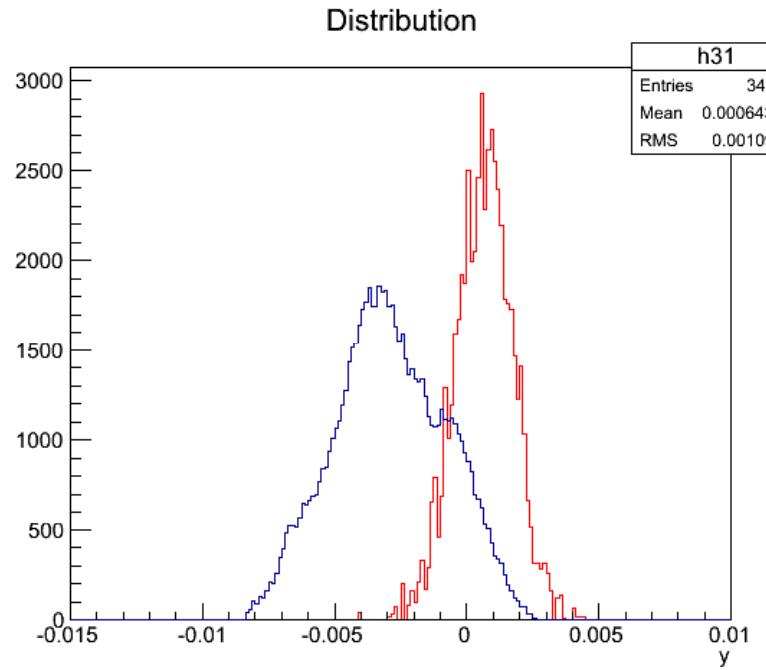
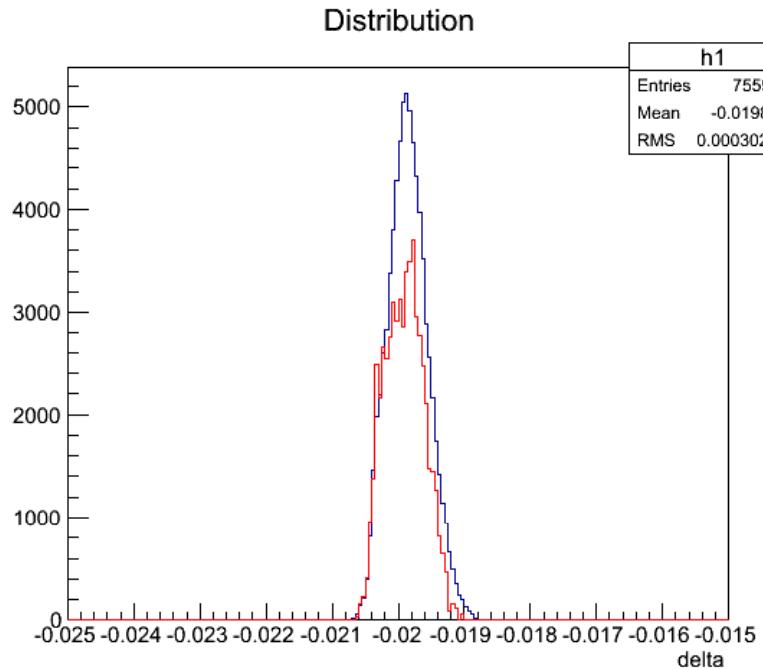
# Delta (D<sub>p</sub>)

Release the dp cut



**Snake  
Data**

**dp=-2%**



# Next

- Finish other dp scan runs
- Other suggestions from this meeting